

REMARKS

Claims 1-11 are pending in this application. By this Amendment, claims 1 and 9 are amended. Reconsideration based on the above amendments and the following remarks is respectfully requested.

The courtesies extended to Applicants' representative by Examiners Davis and McCall at the interview held November 18, 2003, are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below and constitute Applicants' record of the interview.

I. The Claims Define Allowable Subject Matter

The Office Action rejects claims 1-11 under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 6,135,100 to Katoh (hereinafter "Katoh") in view of U.S. Patent No. 4,572,136 to Takeuchi et al. (hereinafter "Takeuchi"). The rejection is respectfully traversed.

During the personal interview, Examiners Davis and McCall asserted that claims 1 and 9 should be amended for purposes of clarification. Thus, for purposes of clarification, claims 1 and 9 have been amended.

Katoh does not disclose that the means of draining the first chamber (8) into the second chamber (20) includes a high-speed valve (32) and the means of draining the second chamber (20) includes a high-speed valve (52), as recited in claim 1.

During the personal interview, Examiners Davis and McCall agreed that Katoh does not disclose these features. However, Examiners Davis and McCall asserted that claim 1 should be amended, in accordance with the Figure and page 5, line 22 - page 6, line 3 of the specification, to clearly indicate that claim 1 recites two separate means for draining, i.e., means for draining the first measuring chamber and means for draining the second measuring chamber. Thus, claim 1 is amended for the purpose of clarification.

Katoh does not disclose changing the volume of the second chamber as the drained fuel enters the second chamber and maintaining a constant volume of the first chamber prior to, during and after injection, as recited in claim 9.

During the personal interview, Examiners Davis and McCall asserted that claim 9 should be amended to clarify the method for measuring characteristics of an injection fuel with respect to the first and second chambers. Thus, claim 9 is amended for the purpose of clarification.

The Office Action admits that Katoh does not disclose a displacement sensor which measures displacement of a piston. However, the Office Action asserts that these deficiencies are made up by Takeuchi. However, Takeuchi does not make up for the deficiencies of Katoh as discussed above.

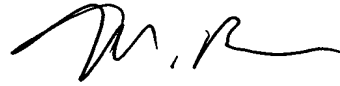
For at least these reasons, it is respectfully submitted that claims 1 and 9 are distinguishable over the applied art. Claims 2-8 and 10-11, which depend from claims 1 and 9, are likewise distinguishable over the applied art for at least the reasons discussed as well as for the additional features they recite. Withdrawal of the rejection under 35 U.S.C. §103(a) is respectfully requested.

II. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-11 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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